Listing of claims:

1. (Currently Amended) A method for preparing a compound of formula I:

bond 1

$$R^a$$
 R^b
 R^b
 R^c
 R^c
 R^d
 R^d

wherein A is 0; N, 0 or S;

W is C_p , where p is 0; 0 or 1;

 R^a , R^b , R^c , R^d , and R^e are the same or different and are independently hydrogen, halogen, nitro, nitroso, lower alkyl, aryl or substituted aryl, lower alkoxy, lower alkoxyalkyl, or cycloalkyl or cycloalkyl alkoxy, where each cycloalkyl group has from 3-7 members, where up to two of the cycloalkyl members are optionally hetero atoms selected from sulfur, oxygen and nitrogen, and where any member of the alkyl, aryl or cycloalkyl group is optionally substituted with halogen, lower alkyl or lower alkoxy, aryl or substituted aryl, halogen, nitro, nitroso, aldehyde, carboxylic acid, amide, ester, or sulfate, or wherein R^a , R^b , and R^c , R^d , and Re may be connected by aromatic, aliphatic, heteroaromatic, heteroaliphatic ring structures or substituted embodiments thereof, or wherein R^c and R^e may be connected by aromatic ring structures or

substituted embodiments thereof, where R^a is absent when A is O—or S, and R^d is absent when p = 0; R^f is hydrogen or is absent; and

wherein

Ar¹ and Ar² ean be are the same or different and are each independently thienyl, or aryl, wherein or aryl is optionally substituted at one or a plurality of positions with halogen, nitro, nitroso, lower alkyl, aryl or optionally substituted aryl, lower alkoxy, lower alkoxyalkyl, or cycloalkyl, or cycloalkyl alkoxy, where each cycloalkyl group has from 3-7 members, where up to two of the cycloalkyl members are optionally hetero atoms selected from sulfur, oxygen and nitrogen, and where any member of the alkyl, aryl or cycloalkyl group is optionally substituted with halogen, lower alkyl or lower alkoxy, aryl or substituted aryl, halogen, nitro, nitroso, aldehyde, carboxylic acid, amide, ester, or sulfate, and

wherein bond 1, bond 2, bond 3 and bond 4 are independently a single bond or a double bond, provided that when A is Sor O, bond 1 is a single bond and where A is N, bond 1 is a double bond,

said method comprising the step of:

reacting an alkyl—methyl diarylborinate of formula III with a compound of formula II to form the compound of formula I

- wherein the methyl diarylborinate of formula III and the compound of formula II are in a ratio of about 1 to about 0.9 equivalents respectively; and
- wherein the methyl diarylborinate of formula III is prepared by reacting about 1 equivalent of trimethylborate with about 2 equivalents of metalloorganic reagent.
- 2. (Cancelled)
- 3. (Currently Amended) The method of claim 1 wherein the compound of formula III formula II is:

$$\begin{array}{c|c} OH & OH & OH \\ \hline N & H_2N & H_2N & H_2N \\ \hline R & R_1 & R_4 \end{array}$$

wherein,

n is 1 or 2;

R and R' are the same or different and are independently hydrogen, halogen, lower alkyl or lower alkoxy, aryl or substituted aryl, halogen, nitro, nitroso, aldehyde, carboxylic acid, amide, ester, or sulfate, and R_1 , R_2 , R_3 , and R_4 are the same or different and are independently hydrogen, halogen, nitro, nitroso, lower alkyl, aryl or substituted aryl, lower alkoxy, lower alkoxyalkyl, or cycloalkyl or cycloalkyl alkoxy, where each cycloalkyl group has from 3–7 members, where up to two of the cycloalkyl members are optionally hetero atoms selected from sulfur, oxygen and nitrogen, and where any member of the alkyl, aryl or cycloalkyl group is optionally substituted with halogen, lower alkyl or lower alkoxy, aryl or substituted aryl, halogen, nitro, nitroso, aldehyde, carboxylic acid, amide, ester, or

 $\begin{array}{l} \text{sulfate, or } R_1, \ R_2, \ R_3, \ \text{and} \ R_4 \text{ may be connected by} \\ \\ \text{aromatic, aliphatic, heteroaromatic, heteroaliphatic ring} \\ \\ \text{structures or substituted embodiments thereof.} \end{array}$

- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Currently Amended) The method of claim 4—1 wherein the metalloorganic reagent is a Grignard reagent or a lithium reagent.
- 7. (Cancelled)
- 8. (Currently Amended) The method of claim 4—1 further comprising the step of treating the reaction product with methanol.
- 9-16. (Cancelled)